<u>Amendments to the Specification</u>

Please replace paragraph [0015], of the application as published with the following amended paragraph:

[0015] The latency function $f_x(\vec{x})$ may be defined by:

$$f_x(\vec{x}) = \min(0, -2aA_x + a\sum_{\substack{y=1\\y\neq x}}^{N} g(y)A_y)$$

where A_x is the amplitude of a stimulation to be applied by ~~device~~ a stimulation electrode x, a is a scaling factor, N is the number of ~~devices~~ surrounding filter bands to which the latency function is constrained, and $g(y)$ is a weighting factor to be applied to the amplitude of electrode A_y .a stimuli applied by device y.

Please replace paragraph [0049], of the application as published with the following amended paragraph:

[0049] The latency function $f_x(\vec{x})$ defines a Mexican-hat shape centered on the stimuli to be applied by the proximate electrode, with the further restriction that it be limited to a minimum of zero, or no delay. A delay will be introduced if the weighted sum of the amplitudes of the filter bands for surrounding electrodes exceeds the value of the current electrode's amplitude. For an electrode that is a local maximum, the weighted sum will be negative and so no extra delay will be added. However, if there is a nearby electrode or group of electrodes with greater amplitude, then the activation time will be delayed. The formula for $f_x(\vec{x})$ is of the form

$$f_x(\vec{x}) = \min(0, -2aA_x + a\sum_{\substack{y=1\\y\neq x}}^{N} g(y)A_y)$$

where A_x is the amplitude of a stimulation to be applied by ~~electrode~~ stimulation electrode x, a is a scaling factor, N is the number of ~~electrodes~~ surrounding filter bands to which the latency function is constrained, and $g(y)$ is a weighting factor to be applied to the amplitude of a ~~stimuli applied by each~~ electrode_A_y ~~y~~, as illustrated in Figure 4. The latency function may be constrained to a limited number of electrodes only in the electrode array or may include all electrodes in the array. The actual value of N may vary according to the listener, the auditory prosthesis and the aural environment in question.

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